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The EU's Climate Leadership: Reconciling Ambition and Reality

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Abstract. This article argues that while the EU aspires to and is capable of structural, directional and instrumental leadership in the global climate regime, it thus far has not fully utilized this potential. Partly this is because the EU's shortcomings with respect to implementation have reduced the credibility of its leadership, partly because the complex internal negotiations tend to divert attention away from consideration of the impacts of its negotiation position on other countries. Nonetheless, the EU is moving the regime-building process forward. It is recommended that if the EU wishes to continue acting as a leader, it then needs to combine the three types of leadership with a short, medium and long-term strategy.

Key words: climate change, directional leadership, European Union, instrumental leadership, structural leadership

Abbreviations: CDM – Clean Development Mechanism; CEIT – Countries with Economies in Transition; EU – European Union; FCCC – Framework Convention on Climate Change; GHG – Greenhouse Gas; JI – Joint Implementation; KP – Kyoto Protocol

1. Introduction

1.1. The ratification deadlock: need for leadership

The Kyoto Protocol (KP) to the United Nations Framework Convention on Climate Change (FCCC), adopted in 1997, is a major achievement of global environmental diplomacy. It sets binding targets for developed countries and countries with economies in transition (CEITs) and contains three new, so-called flexibility mechanisms.[1] Although it developed rapidly in the early stage, the climate change regime is now at a critical stage because just 28 developing countries and CEITs have ratified the KP. This is insufficient for the KP to enter into force and has delayed implementation of domestic measures and the flexibility mechanisms.

It seems clear that, unless the KP enters into force relatively soon, the climate regime will lose its momentum. In this situation, some measure of leadership is needed in order to break the current negotiation and ratification impasse. It is against

this background that we examine the potential for the European Union (EU) to play a leadership role in the climate regime by assessing multidisciplinary analyses (e.g. Ringius 1999a; Ringius 1999b; Ott and Oberthür 1999; Gupta and Grubb (eds.) 2000a; Haigh 1999).[2] We also draw on a series of interviews with negotiators and observers from EU and non-EU countries (Gupta and van der Grijp 1999). We will touch upon a number of inter-linked issues such as international burden sharing, policies and measures, the flexibility mechanisms, increasing international participation in mitigation projects (especially the inclusion of developing countries) and adaptation to climate change.

1.2. Theoretical perspectives

Recent literature has used many different terms to describe leadership (Young 1991; Underdal 1994; and Malnes 1995): structural, coercive, "carrots and sticks approaches", entrepreneurial, instrumental, problem-solving, intellectual, unilateral, and directional leadership. In this article, we build on leadership definitions explored in a recent project on EU leadership in the climate regime (Grubb and Gupta 2000b, p. 23). We define a *structural leader* as one who acts on behalf of a state and leads the bargaining process by constructive use of the power that stems from the state's material resources. This type of leader will often use "carrots" and/or "sticks" to influence others. A *directional leader* demonstrates through domestic implementation that a goal is achievable and attempts to shape how negotiators perceive the issues under consideration and think about solutions. For example, this type of leadership is at play if the EU sets an example for others to follow and demonstrates its willingness and ability to deal with the climate problem (and thereby increase its symbolic power and legitimacy).[3] To construct mutually beneficial solutions, an *instrumental leader* uses issue-linkage and coalition-building and puts emphasis on integrative rather than distributive bargaining.

Structural leadership is not merely a question of economic and material power: the way in which power is used to craft incentives for others to cooperate is also important. The directional leader is not merely "ahead of the crowd" but influences behavior by changing the incentives of others and demonstrates the feasibility, effectiveness or efficiency of a particular measure, and thus changes the perceptions and beliefs of others.[4] Alternatively, by demonstrating that a particular course of action may be normatively compelling, it "raises the moral standard" against which others will be judged. Instrumental leadership is not just mastering negotiating skills, but using these skills to pursue issue-linkage, issue-based coalitions and integrative bargaining.

By virtue of its membership (at present 15 countries, but the group is likely to grow considerably), combined population (370 million) and combined GDP (5,690 billion euro; European Commission 1998a, p. 18) the EU has considerable structural power. Evidently, it is a unique and globally important actor. Its major potential

strength is that it combines a growing political will and implementation potential (see Section 2) with a common negotiating position for 15 industrialized countries (see Section 3). It can rely on the 15 foreign affairs (and environmental) departments of the member states to use their long-standing diplomatic relations with most countries. It has suggested far-reaching targets in relation to climate change. But although the EU programme SYNERGY provides financial support to non-EU countries with respect to energy policy and the programs THERMIE, ALTENER, INCO, LIFE, TACIS and PHARE provide support with respect to related policy areas, the EU has not developed incentives purely based on its structural power but has rather aspired to act as directional and instrumental leader.

2. The EU and Directional Leadership

2.1. Potential to reduce emissions

The international distribution of the costs of climate change is a key issue at this stage of the climate negotiations. The perceived magnitude of the costs (and benefits) of climate control and their international distribution cause widespread concern (especially in the US) and largely explains the current deadlock among the OECD countries. The perceived lack of leadership by the developed countries explains to some extent the deadlock in the negotiations between developed and developing countries.

Unlike the JUSCANZ, the EU has generally been optimistic about the domestic opportunities for reducing greenhouse gas (GHG) emissions.[5] In 1997, the European Commission (1997) predicted that new policies and measures could reduce total CO_2 emissions by about 800 million tonnes by the year 2010, equaling a 15 percent reduction compared to the 1990 level. This reduction could, if made cost-effectively, be achieved at a cost of 0.2–0.4 percent of GDP in 2010. The largest potential for emission reduction was in passenger cars in the transport sector and through cogeneration and renewables in power generation. In the absence of new policies, however, total emissions were predicted to increase by 8 percent over the 1990 level by 2010.

But this optimistic scenario unfortunately does not imply that production and consumption patterns in the EU have become environmentally sustainable. A recent study (Berdowski et al. 1999) shows that the EU as a group has managed to nearly stabilize emissions in the 1990–1996 period primarily because Germany and Britain have offset increases in emissions from the remaining 13 countries. Moreover, circumstances and policies largely unrelated to climate policies have contributed to significant GHG reductions within the EU. German reductions have to a significant degree been the result of economic restructuring in the former East Germany. British reductions have mainly been an unintended outcome of privatization in its energy sector (cf. European Commission 1998a). Most member states have adopted

a number of climate measures, but high economic growth has led to emission increases that have offset planned reductions.

The EU has competence on trade, tax and foreign policy and competence to harmonize laws on environment, energy, and transport. It has, for example, used its competence to liberalize electricity markets, to adopt the Integrated Pollution Prevention Control Directive,[6] to revise the Large Combustion Power Plant Directive, to adopt directives on packaging and landfills, and to reform the Common Agricultural Policy, all of which will have impacts on the EU's GHG emissions. Since 1990, the EU has pursued four major policy instruments to reduce emissions, namely carbon/energy taxes, policies to encourage demand side management, renewable energy technologies, and the common monitoring mechanism (Ringius 1999b; Wettestad 2000; Dahl 2000).

Although the carbon/energy tax has been on the EU agenda for a long time, progress has for many reasons been slow. Some countries argue that fiscal issues should be decided at national level. Others believe that these taxes will have a negative impact on the competitiveness of industry. Furthermore, the consensus requirement for fiscal environmental measures and the need for lenient treatment of the Cohesion countries (i.e. Greece, Ireland, Portugal, and Spain) severely impedes progress. There is a proposal for a minimum energy tax on the table and several countries have individually adopted some taxes. The opposition to these taxes seems to have weakened at EU level but a tendency to "nationalize" fiscal issues is apparent.[7]

In 1987 the Commission developed the Specific Action for Vigorous Energy Efficiency (SAVE) program but the resources and regulatory content were weakened by the time the program was adopted, and it had little impact on energy efficiency (Wagner 1997; Collier 1996; Wettestad 2000). However, it did achieve legal and administrative actions improving the performance standards of buildings and equipment and greater efficiency in power generation and supply, and support for 250 pilot actions (European Commission 1998a, p. 38). SAVE-II, with a budget of 66 million euro, aims to stimulate energy efficiency and encourages energy conservation investments by private and public consumers and industry as well as improvement of the energy intensity of end-users (European Commission Press Release 1999b). Directives on energy efficiency requirements for household refrigerators and freezers, energy labeling of household washing machines, and energy labeling of combined washer-dryers have also been adopted.

The EU has also developed the ALTENER program (1993–1997) to promote renewable energy. Although ambitiously conceived, it was weakened in content and budget by the time it was adopted and there exist no assessments of the program's impact on emissions (Wettestad 2000; Collier 1996; European Commission 1998a). The evaluation of the program led to the adoption of ALTENER II (1998–2002) and it is expected that the use of renewables could bring about a 16 percent reduction of CO_2 emissions by 2020 relative to 1990 levels. The

Parliament-Council Conciliation Committee has recently agreed to spend ECU 77 million on ALTENER (European Commission Press Release 1999b).[8]

The monitoring mechanism for GHGs, a key EU program with significant potential, has been negatively affected by poor implementation. Member state reports have been delayed, their quality has varied, and no reports were prepared in 1997 and 1998 (Coffey, Wilkinson and Haigh 1998; European Commission 1998a). Haigh (1999) speculates that the lack of commitment to form suggests lack of commitment to substance by the member states.

The Commission has launched a strategy to improve the fuel efficiency of passenger cars to reduce CO_2 emissions from new cars to 120g/km by 2005 and at the latest by 2010 (European Commission 1998a) through voluntary agreements with the industry, fiscal incentives, and CO_2 emissions labeling (European Commission Press Release 2000). The recent agreement with the Automobile Manufacturers Association is encouraging though analysts are wary of being too positive about the agreement (Wettestad 2000, p. 40). The Parliament Council Conciliation Committee agreed on March 9, 2000 to establish a monitoring scheme for CO_2 emissions from new passenger cars that would have to be confirmed by an absolute majority of votes in the Parliament and a qualified majority in the Council. Such a monitoring scheme would strengthen the impact of voluntary environmental agreements with the car industry.

About 310 voluntary agreements have been reached in Europe. However, experience with voluntary environmental agreements is mixed at the national level. For example, targets have been set below business-as-usual expectations as a result of strategic behavior of industry, and few environmental agreements actually include a monitoring clause (Carraro and Léveque 1999, p. 3; Liefferink and Mol 1997).

Still another opportunity is integration of environmental issues into other policy areas. Although on the agenda for more than a decade, the Commission has only recently committed itself to a number of measures, including a new integration unit reporting directly to the Directorate General (DG) for the Environment, an integration correspondent in each of the DGs, environmental appraisal of proposals with environmental effects, an annual appraisal of environmental performance, and an environmental code of conduct. The 1997 Amsterdam treaty emphasizes sustainable development and environmental integration, and the Cardiff process initiated in June 1998 has led to the development of strategies for the integration of the environment into policy areas such as energy, transport, and agriculture (European Commission 1999; European Commission Press Release 1999b). Although the Commission's strategies are general and lack specific targets and satisfactory indicators for measuring policy integration (e.g. see House of Lords 1999), sectoral integration and mainstreaming of the environment could have a significant impact on the EU's ability to address the climate problem.

The EU has had more success in tackling the complex and controversial issue of internal burden sharing. Since 1990, the EU had a common target but agreeing

on the allocation of national targets among the member states proved to be very difficult. The final breakthrough came in 1997 with the development of the so-called Triptique Approach by Dutch experts and decision-makers (Blok et al. 1997). This bottom-up approach to differentiation calculated national obligations by adding individual allowances for three economic sectors (domestic, heavy industry and electricity generation) and by taking economic growth, population changes, and climate-adjusted energy use into account. The sectoral allowances themselves were not regarded as sectoral targets.[9] This approach created a useful framework for the EU's internal negotiations prior to Kyoto and facilitated agreement on a differentiation of national targets and an overall target for the OECD (Ringius 1999a).

Environmental groups, industry, the research community and municipalities have on the whole supported the EU. European non-governmental organizations, including the Climate Network Europe and the World Wide Fund for Nature, have been active since the early 1990s. 800 European local authorities are members of the Climate Alliance which aims "to halve CO_2 emissions by the year 2010, and then to reduce them even further step by step" (Klima-Bündnis/Alianza del Clima e. V. 1999, p. 3). European industry is also responding with concrete proposals. For example, Shell and British Petroleum are developing renewable energy services, the European Chemical Industry has a Voluntary Energy Efficiency Programme (CEFIC 1997), and the European Business Council for a Sustainable Energy Future promotes a renewable portfolio obligation for all energy service companies (E5 1998). The building sector consumes large amounts of energy and significant emissions reductions could be achieved if the EU develops innovative ways to encourage establishment of coalitions of actors such as the European Alliance of Companies for Energy Efficiency in Buildings (ICI's Euroce) and interested local authorities (EC workshop, 1998). SAVE-II includes a new initiative to encourage local and regional energy management agencies to undertake energy efficiency projects (European Commission 1998a, p. 39). Given industry's extended time-horizons, industry is likely to be the most suitable body to provide and support long-term leadership (Graedel and Allenby 1995, p. xvii; Fussler and James 1996, p. 16). But since companies are affected by "industrial inertia" (cf. Byé 1997; Fussler and James 1996, p. 9), healthy scepticism would seem justified.

2.2. Implications

Europe's comparative advantage is that it has a supranational regulatory framework for implementation of measures in the member states. But the voting procedures in the Council of Ministers are time consuming and delay action, and the unanimity rule has led to decisions that reflect the lowest common denominator and lack of harmonization of environmental directives (unlike the directives dealing with the technical obstacles and the internal market) (Johnson and Corcelle 1995, p. 4). The Environment Directorate seems to be understaffed and conflicts exist

among Directorate Generals (Jachtenfuchs and Huber 1993), Councils, countries, and ministries in member states. The powers of the EU Parliament, however, have increased since mid-1999.

As a supranational organization, the EU is potentially able to facilitate a decision-making process that commits 15 countries. Optimists could argue that the EU is still in the midst of a learning process and that it will be able to exert strong directional leadership if it improved its administrative and political machinery and fully implemented its policies. As mentioned, it seems that the EU's emissions will be close to 1990 levels by 2000; this obviously would reduce the challenge of reaching the Kyoto targets later. Furthermore, the EU influences the prospective members of the EU and encourages them to introduce energy taxes, to adopt demand side management, and to explore the potential for use of renewable energy.[10] Nigel Haigh's (1999) historical analysis concludes that the EU has become a major influence in national environmental policy, and has started to integrate environmental concerns into non-environmental policies. Pessimists, on the other hand, would argue that the EU's modest achievements simply reflect that deep-rooted differences among countries continue to exist and that these differences will be further exacerbated by the new members. In such a case, the EU would be ill-suited as a leader.

3. EU and Instrumental Leadership

3.1. The negotiating strategy of the EU

The EU has been active since 1990 when the European Council adopted a stabilization target for CO_2 emissions by the year 2000. This decision energized the work of the Intergovernmental Negotiating Committee on Climate Change and facilitated the adoption of similar positions by other developed countries and CEITs. However, the EU did not succeed in Rio de Janeiro to convince the US to agree to a legally binding determinate text on targets in the FCCC.

After Rio, the EU focused on internal policies and burden sharing. At COP-1 in Berlin in 1995, the EU is credited for having persuaded the G-77 to support its proposal to establish a negotiating process for legally binding commitments for developed countries (Yamin 2000, p. 50). Approximately half a year before COP-3 in Kyoto in 1997, the EU tabled a proposal for a 15 percent cut by 2010 in CO_2, methane and nitrous oxide emissions from all OECD countries, compared to the 1990 emission levels. The EU was opposed to differentiation at the international level and suggested instead a flat target for all developed countries, although it had differentiated the targets of the member states. Despite resistance from the JUSCANZ group, strong international pressure led to the legally binding quantified, differentiated commitments in the KP.

The EU suggested in the negotiations that the KP should adopt annexes with mandatory common policies, annexes with policies that should be given high priority,

and annexes with policies that could be included depending on the national circumstances of countries. It developed this position partly as a fall-back position in case the US continued to oppose targets. Other claims about possible EU motives include the need for the smaller EU countries to solve internal disagreements or the wish of the Commission to expand its competence through international agreement on policies and measures (Yamin 2000, pp. 52–53; Dahl 2000). But the EU was fairly isolated on this issue and was unable to articulate and defend why its approach would be more reasonable, cost-effective and fair to all countries. Although the final text in the KP does not reflect the EU's position, it anyway lists a number of policies and measures on which countries could focus (Article 2).

Being sympathetic to G-77 arguments, the EU argued in favor of limiting JI (a much debated policy instrument in the climate change regime) to countries with quantified commitments and subject to the principles of supplementarity and additionality (see discussion in other articles, this issue). However, although the EU succeeded in limiting the use of JI to the developed countries, the negotiations did not produce agreement on supplementarity and additionality. In the pre-Kyoto phase, the EU did not support international emissions trading but an article is included in the KP that potentially will allow emissions trading (Article 17). Furthermore, the Brazilian proposal for a Clean Development Fund, the position of the JUSCANZ countries on the need to include developing countries in JI, and the position of some developing countries supporting JI, led to the birth of the CDM.

3.2. The EU and its influence on other countries

As the above development shows, the EU has played a proactive role in the climate negotiations. Despite this, the EU is often viewed as being somewhat controversial. First, many non-EU negotiators and observers believe that the EU has acted hypocritically in several instances: (i) the EU dropped the –15 percent target in Kyoto; (ii) the EU's opposition to the high emission allowances to Russia and Ukraine (which could open the door to trading in so-called "hot air") is unjustified when the EU itself has benefited from wind-fall gains that have brought down its emissions; and (iii) the EU opposed target differentiation for all but EU countries. Second, some have pointed out that the EU was neither proactively engaging in discussions with, nor seeking support from the accession countries, developing countries, or JUSCANZ in the pre-Kyoto negotiations. Third, the EU seldom appears to have a clear fall-back position. This is partly because of the complex nature of the EU that it can seldom manoeuvre in public without a clear mandate (Yamin 2000).[11]

The KP implied a compromise for all major industrialized countries. Unlike at Rio, in Kyoto the EU successfully pressured the US to go beyond stabilization. Although the EU failed to achieve agreement on a 15 percent cut in the OECD coun-

tries, the Kyoto target came closer to the EU's position than that of the US. But the EU had much less influence on policies and measures. Although opposed to the flexibility mechanisms of joint implementation and international tradable pollution permits that were strongly advocated by the US and the JUSCANZ group, these were the most prominent measures to come out of Kyoto. The EU insisted that these measures should only be a supplement to domestic action but failed to restrict their use. Furthermore, the KP reflects the US position on the issue of "comprehensiveness" and thus regulates three long-lived industrial gases in addition to those greenhouse gases favored by the EU. Moreover, although the EU insisted that too much scientific and technical uncertainty surrounded the issue of carbon sequestration and forest and soil carbon sinks, the US also succeeded in including carbon sequestration in the KP. Nonetheless, we believe that the EU has raised the moral standard against which others have been judged.

4. The EU and its Potential for Future Leadership

4.1. Leadership options for the EU

Several European analysts have argued that the EU could steer the climate regime in a more productive direction. Ott and Oberthür (1999) suggest a three-pronged approach: the EU should ratify the KP in coalition with Russia, Eastern European CEITs, and Japan; it should strengthen the implementation of climate policies of the member states and coordinate such measures among the leader countries; and it should involve the developing countries by helping them to adapt to climate change and engage in a dialogue on the fair allocation of emission rights. Grubb et al. (2000) also argue that the EU should ratify the KP and should seek to involve key developed and developing countries. They believe that the EU should confidently try and implement the Kyoto Protocol since there is internal technical and political feasibility, and since there is a range of multiple benefits in a number of sectors. Furthermore, the EU needs to put considerable thought into how the climate regime should be developed further and should harness all its diplomatic skills to bring other countries, including the US, on board.

We believe that it would be especially useful if the EU in addition would develop a short, medium and long-term strategy combining elements of structural, directional and instrumental leadership. In terms of structural leadership, we believe that the EU should influence the G-7 and G-77 through summit meetings in the short-term, coordinate strategies in other issue areas and other cooperative regimes in the medium-term, and use economic and material incentives to promote industrial transformation and sustainable development. The EU member states have discussed climate change at the G-7 meeting and at the Africa-Europe Summit (2000) where there was agreement for support of national climate policy focal points and policies and CDM projects and technology transfer. These are indications that the climate

change agenda is being integrated into the political agendas of cooperation between regions and countries, an important trend for further development.

4.2. Potential for directional leadership

We believe that the EU in the short-term needs to strengthen implementation of existing and new programmes. In this context, the Commission's recent Green Paper on GHG emissions trading experimentation within the Community by 2005 and the Environment Council's (2000b) decision to welcome a recent proposal of the Commission for a European Climate Change Programme are healthy initiatives.

In the medium-term, the EU needs to strengthen the Cardiff Process and increase the opportunities for sectoral integration of environmental issues. The European Environment Council (2000b) calls for a comprehensive review of the integration process at the next meeting in June 2001. But the integration process will bring to the fore a range of complex environment-economy issues and debates.

Credibility is a key component of any leadership strategy and the EU needs to develop a long-term vision of global climate policy and to implement its common and national climate targets. To reach the KP targets, it will be necessary to achieve a reduction of around 550 to 600 million tonnes of CO_2 equivalents (European Commission 1998b, p. 8). Concerns about loss of competitiveness in international markets as a consequence of unilaterally adopted climate policies have had some effect in the EU. But policies that promote industrial transformation based on the principles of de-materialisation, de-carbonisation, and eco-efficiency are likely to neutralize this threat. Weizsäcker et al. (1997) have emphasized the need for a factor four philosophy (i.e. increasing wealth but decreasing environmental damages by reducing material and energy intensity by a factor of four) as a first step toward a long-term factor ten philosophy. This could, among other things, create room for emissions growth in the developing countries. If placed in the context of industrial change, climate policy may even lead to an improvement of the quality and quantity of employment in Europe, reduce oil and gas imports, and, consequently, reduce the risk of resource-related conflicts in other parts of the world (Jung and Loske 2000). Every major change creates opportunities for new actors. This can be promoted through a new macro-economic structure, internalization of costs and incentives for consumers (Vellinga et al. 1998).

4.3. Potential for instrumental leadership

It is necessary but not sufficient for the EU to focus internally. In order to send a strong signal to the private sector and to accelerate the use of the flexibility mechanisms, the KP must soon enter into force. This necessitates ratification by at least 55 countries, including the Annex-1 countries (i.e. developed countries and CEITs) responsible for at least 55 per cent of the total CO_2 emissions by Annex-1 coun-

tries in 1990. At least two of the three major emitters (the US, the EU and Russia) must ratify the KP. An influential school in international politics would argue that the US's blocking power is a strong reason for doubting that the EU alone can move a sufficiently large number of countries to ratify the KP. From this perspective, it is even questionable whether the EU itself would ratify the KP unless the US also ratifies. Analysts who apply game theoretical models similarly argue that the EU cannot lead alone (Carraro 2000). This implies, among other things, that it is neither sufficient nor wise to try to isolate the US.

A better strategy would be to develop a "ratification coalition". It definitely would be worthwhile to examine the possibilities for building a "55% coalition" consisting of G-7 and G-77 countries.[12] The European Environment Council (2000b) has adopted a Community Strategy on Climate Change that reiterates its position to promote entry into force of the KP by 2002 at the latest and to that effect makes recommendations to member states to start taking action in order to ratify. At the recent Japan-EU Summit (2000), it was agreed that Japan and the EU will contribute "to ensure the entry into force of the Kyoto Protocol by no later than 2002". We are appreciative of the lobbying work undertaken by EU member countries to persuade Japan, US and Russia that it is vital that the KP enters into force by 2002. The EU appears to be well on its way to secure the 55% coalition, although it needs to consolidate the achieved results.

But one critical issue remains unsolved: the participation of the US. The EU should use the flexibility mechanisms as a means of engaging the US. It is also relevant to consider opportunities to increase the US's willingness to pay for climate protection. Among the potential strategies are building international coalitions between EU and US decision-makers, awareness raising in the US, research collaboration between the EU and the US, and neutralizing blocking coalitions in the US domestic political arena.

By ratifying the KP the EU might strengthen pro-Kyoto forces in the US. Furthermore, initiatives taken by EU-based energy industry may influence American oil companies and energy companies. The EU may make progress by encouraging the EU-based industry to carefully examine opportunities for action with their counterparts in the US, by encouraging EU-based scientists, economists and social scientists to examine these issues with their American counterparts, and by encouraging EU Parliamentarians to discuss such issues with US legislators. Perhaps scientists could become a key driving force in US domestic policy as the bulk of the world's climate scientists are US-based and the knowledge base on this issue is most developed in the US. Thus, although the current political climate in the US is unfavorable, ratification may be possible in the medium term.

In order to bring in the non-EU members of the OECD and develop issue-based coalitions, the EU should explore possibilities for engaging in a productive dialogue on sinks, financial mechanisms, and the involvement of developing countries.[13] For example, Japan, Norway, and Switzerland do not quite share the US's position

on the proper role of developing countries in the global climate regime. Another example, Norway has adopted a carbon tax and others are also considering introducing a tax. A third issue is the EU position on "hot air". While maintaining that the credibility of the regime is important the collapse of the economies in Russia and Ukraine to levels lower than some developing countries implies that it is vital to keep these countries interested in climate policy during their re-structuring process. Allowing "hot air" may be a small price to pay for keeping these countries committed to the process while allowing for a coalition with the Umbrella group.[14] Admittedly, this view is not entirely supported by the literature. Another point we would like to make is that supplementarity is not just an economic but also a political issue. While supplementarity increases the abatement cost, it demonstrates to developing countries and CEITs that developed countries take their own responsibilities seriously. If supplementarity is implemented through an adaptation tax levied on *all* three flexibility mechanisms, this would raise the cost of taking measures abroad and ensure that a higher proportion of reductions will be made domestically. Such an approach would be in line with the G-77's view on harmonising the flexibility mechanisms and raising additional resources for adaptation.

There is no doubt that the developing countries in the long run will need to participate in the abatement efforts undertaken within the global climate regime. Strategies emphasizing win-win bargaining will be important in order to include them. Cooperation with the developing countries is an area where the EU might serve as a bridge between the non-EU developed countries and the developing countries because the EU and its member states have strong historical ties with developing countries and the EU often is close to their position(s). First, the EU should make clear that the means to encourage the majority of the G-77 countries is a long-term policy that will be undertaken in the context of sustainable development. It should make clear that the first steps will be taken by the developed countries through ratification, demonstrable progress by 2005, and legally binding commitments for the second budget period. Second, the EU should understand the concern of the G-77 that strategies in relation to "graduation," "key developing countries," etc. are seen as divide-and-rule strategies. Discussions between the EU and the G-77 leadership on the major future steps within the climate regime would therefore be useful. The outcomes of such consultations could be reflected in joint statements of the EU and G-77, thus demonstrating that the EU can make flexible issue-based coalitions. Third, instead of focusing only on targets and differentiation, the EU could attempt to develop a package approach that makes integrative bargaining possible.[15] The EU appears to be convinced of the merits of such a step. The package would probably need to include technology transfer, cooperation through the CDM, a compliance fund, an adaptation tax on all flexibility mechanisms, and a guarantee that ODA will not be channeled into abatement projects. Constructive bilateral EU-US discussions on the CDM would be a good starting point.

With respect to the issue of differentiation, the EU could build on the experi-

ence gained in the internal negotiations on the EU "bubble," though it should be stressed that it took the member states more than five years to work out a differentiated burden sharing arrangement. Although the Triptique Approach created an useful framework and starting points for negotiations, it cannot be assumed that future differentiation can be dealt with successfully simply by following this or any other technical approach (Ringius 1999a).[16] Nonetheless, the EU should support attempts to develop frameworks for global differentiation of commitments. Such a framework could include an elaboration of the polluter pays and the ability to pay principles. The elaboration of these principles may include not only legal precedents but also ideas emerging from the Tryptique Approach. It is evident that the expectations of developing countries have been raised significantly by the prospect of future financial mechanisms (i.e. the CDM) channeling resources and investments from industrialized to developing countries. But many probably would agree that an important step in involving developing countries better is cooperation that explores and demonstrates how climate concerns could be integrated into existing policies without changing overall national priorities or negatively affecting the welfare and the economic and social development in developing countries.

5. Conclusion

The EU could perform a leader role by building issue-based international and transnational coalitions and by increasing domestic implementation. We believe that the EU could develop a strategy that combines structural, directional and instrumental elements with a short, medium and long-term focus (see Table I below).

We will highlight three of the options identified in this article. First, the EU should build a "55% coalition" with like-minded countries and groups within the US and create the conditions for early ratification of the KP. The EU needs to correct inconsistency and disingenuity between its internal policy and its international policy and should optimize the combination of a common negotiation position and the diplomatic channels of its fifteen member states to ensure that its total influence is united, flexible, effective, and wide in its outreach. The EU and its members could develop capacity-building programmes in developing countries financed by ODA and should continue to stress the goal of industrial transformation at bilateral and multilateral summits.

Second, the EU should through traditional channels and through support from local organizations and NGOs improve the credibility of its internal policy and implement policies and measures in member countries. Critique that the EU is making use of no-regrets policies and not developing specific climate policies can be countered by arguing that climate policy per se is unlikely to be successful; one needs to talk in terms of energy, transport and agriculture (O'Riordan and Jaeger 1996).

Third, the EU should develop a clearer vision of the long-term development of

Table I. Elements of a leadership strategy.

Leadership	Short-term	Medium-term	Long-term
Structural	Influence G-7 and G-77 through summit meetings	Coordinate strategies in other issue areas and vis-à-vis other international regimes	Use economic and material incentives to foster global industrial transformation and promote sustainable development
Directional	Strengthen implementation of SAVE, ALTENER, the Monitoring Mechanism, voluntary agreements; implement domestic (and possibly regional) emissions trading	Improve credibility; improve sectoral integration; provide demonstrable progress	Promote industrial transformation and sustainable development in the EU
Instrumental	Build a "55% coalition" able to ratify the Kyoto Protocol	Strengthen relationship with Accession Countries and adopt second commitment period targets	Build strong coalitions with developing countries

the climate change regime. The EU vision should focus on identifying ways to demonstrate that the perceived negative impacts of climate policies on economic development and well-being could be minimized through industrial transformation policies. The key ingredients of such a vision should be promotion of a new macro-incentive structure, including taxing resources and pollutants rather than labor, internalizing environmental costs in pricing policy, adoption of an industrial ecology agenda, including product and process lifecycle management, and creation of incentives for consumers to change their consumption patterns on the basis of conscious consumer choices (cf. Weiszächer et al. 1997; Vellinga et al. 1998; Grubb et al. 2000). This step could demonstrate that climate policies are feasible in the long-term as well as reduce the costs of taking measures in other parts of the world.

Undoubtedly, the EU has been quite successful as an international leader. The Kyoto targets would not have been as ambitious as they are without the EU. The follow-up to Kyoto, however, depends on effective implementation; a different game altogether. A few EU member states will meet the stabilization target for the year 2000 due to lucky circumstances, but presumably no one will achieve their targets as a result of following a wise strategy and effective implementation. EU leadership is therefore loosing credibility. To remain influential in the years ahead, the EU's leadership strategy must be credible both in terms of rhetoric and in terms of action.

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Notes

1. Joint Implementation (JI), the Clean Development Mechanism (CDM), and international emissions trading (IET).
2. Although it is the European Community that signs and ratifies international agreements, we follow the common usage in this field, thus the EU.
3. On this type of leadership, see Ringius (2000).
4. For example, in an open economy unilateral emission control measures by one country would tend to reduce the abatement costs faced by competing economies. We thank Arild Underdal for bringing this point to our attention.
5. The original group, consisting of Canada, Australia, and New Zealand (CANZ), was later expanded to include USA, Japan, Switzerland, Norway (JUSSCANNZ). Mexico and Iceland may participate in these meetings.
6. This Directive includes energy efficiency as a criterion for the determination of best available technology (European Commission 1998, p. 9).
7. See Schlegelemilch (1998) for a detailed analysis.
8. At the same time, the effectiveness of these measures is undermined by the subsidies in the EU on coal and energy. The average annual direct subsidies to energy producers in Western Europe is US$ 19.9 billion (Ruigrok and Oosterhuis 1997).
9. A per capita approach was used to calculate emission allowances in the domestic sector. The Triptique Approach assumed that the emissions from the domestic sector would converge at the same level in the member states in year 2030, and that emission allowances per capita were identical in all EU member states in 2030. Energy efficiency improvement targets were established for the heavy industry. Because of large differences in the EU electricity sector, a tailor-made approach was followed to calculation of emissions allowances in this sector. Significantly, it was assumed that the poorer member countries should carry lesser burdens and, rather than choosing a single indicator at the level of individual members, the approach combined several energy indicators at the sectoral level. In this way it shifted attention away from comparing contributions and fairness among members to comparing sectoral contributions and fairness across sectors in the EU (Ringius 1999a).
10. Michaelowa and Betz (2000) argue in favor of using the surplus emissions in Eastern European countries after their accession to the EU. This would not be an indication of leadership, however, but would alleviate some of the pressure for domestic implementation.
11. However, this is not to say that the EU does not have a confidential fall back position; merely that the EU is unable to respond flexibly to positions and statements of others.
12. One precedent is the "30% coalition" that led to the first Sulphur Protocol to the Long Range Transboundary Movement of Air Pollutants. Another is the "stabilisation coalition" that led to the adoption of the weakly worded stabilisation aspiration in the FCCC.
13. The Council (2000b) supports supplementarity, guidelines for the flexibility mechanisms, the

adoption of a strong compliance mechanism including a Compliance Fund, a Compliance Action Plan, loss of access to the Kyoto mechanisms as a consequence of non-compliance, and the development of a positive list of safe, environmentally sound, eligible projects based on renewable energy sources, energy efficiency improvements and demand side management in energy and transport to be supported through the flexibility mechanisms. Finally, the EU reiterates that the inclusion of sinks should not undermine the effectiveness of the international agreements.

14. This point has been repeatedly made by representatives of these countries, including by Igor Bashmakov at the EFIEA conference in April 2000.
15. See, for example, Gupta 1999 on a proposal for a package approach to involve developing countries.
16. EU scholars currently are developing alternative differentiation frameworks and approaches.

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